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SQUIB: ON SCHEMAS AND WORD TYPES IN ENGLISH FROM THE PERSPECTIVE OF CONSTRUCTIONALIZATION AND CONSTRUCTIONAL CHANGE

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ABSTRACT

This squib considers some of the issues surrounding the growth and contractions of contentful schemas in the history of English, and the appearance of new word types. An outcome of recent research into language change from the perspective of construction grammar has been the clearer articulation of the relationship between expansion and contraction in both the 'lexical' and 'grammatical' domains. Assuming that (i) linguistic knowledge is knowledge of a network of conventionalized and entrenched symbolic pairings of form and meaning (Goldberg 2013), (ii) there is no essential difference between morphological constructions and syntactic constructions (Croft 2001; Booij 2010), and (iii) like syntactic strings, morphological expressions can be positioned on a continuum, ranging from substantive to schematic, I consider the constructional nature of schemas and word types in the history of English.

KEY WORDS: constructionalization, lexical schemas, lexicalization

1. INTRODUCTION

This squib considers some of the issues surrounding the growth and contractions of contentful schemas in the history of English, and the appearance of new word types. As Traugott (this volume) has observed, an interesting outcome of research into language change from the perspective of construction grammar has been the clearer articulation of the relationship between expansion and contraction in both the 'lexical' and 'grammatical' domains. In what follows, I make the following assumptions regarding the nature of language, which is shared by many of those who adopt a construction grammar perspective. First, linguistic knowledge is to be understood as knowledge of a network of conventionalized and entrenched symbolic pairings of form and meaning (see Goldberg 2013 and references therein). Second, there is no essential difference between morphological constructions and syntactic constructions, except that the former involve bound morphemes, whereas the latter may be entirely made up of free morphemes (Croft 2001: 17; Booij 2010). Third, like syntactic strings,

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morphological expressions can be positioned on a continuum, ranging from substantive, indicated by italics in (1), to schematicity, indicated by small capitals in (1), on which see further Croft 2007: 470):

(1) maximally substantive: *kill-er* partially schematic: *kill-*AGENT; VERB-*er* fully schematic: VERB-AGENT

The focus in this squib will be on the relationship between the different levels in (1). In particular, I consider whether form-meaning pairings at each of these levels ought to be classified as constructions.

The first issue to be explored is the constructional status of individual types compared to the schemas which sanction them. Hilpert (forthcoming) makes the following observation regarding the constructional status of instantiations of lexical schemas and the schemas themselves:

instantiations of a word formation process are constructions if they are conventionalized form-meaning pairings; the abstract schema behind a word formation process is a construction if that schema allows speakers to produce or process new original coinages.

The latter part of this observation relates to the productivity of the schema: productive schemas (as evidenced in corpora) are constructions. The status of non-productive schemas is less clear. Speakers of English are familiar with word types such as *quicken*, *soften* and *deaden*, which are verbs derived from adjectives by adding the suffix *-en*. But evidence from the *British National Corpus*, as provided by Hilpert (forthcoming), suggests that such speakers no longer have a productive word-formation process to derive verbs in this way. Thus while the VERB-*er* pattern in (1) might legitimately be said to be constructional, the ADJECTIVE-*en* pattern appears not to be. From a historical perspective, the question is when does an abstract pattern begin to be (or cease to be) a construction? Given the gradient nature of morphological productivity, how productive must a pattern be to warrant status as a construction?

The second issue raises questions about the constructional nature of particular word-formation processes. Constructions are conventional pairings of form and meaning. This is true of individual word types (like *killer*) and of the abstract schema which sanctions those types (like *verb-er*), as follows:

- (2) $[killer] \leftrightarrow$ 'one who kills'
- (3) $[VERB-er] \leftrightarrow \text{`one who VERBS'}$

This pattern is relatively clear for affixation processes, but is less so for abbreviating word formation processes, such as blends (*brunch* < *breakfast* and *lunch*, *smog* < *smoke* and *fog*) and especially acronyms (*radar* < *radio detection and ranging*, *ISA* < *individual savings account*) and initialisms (*BBC* < *British Broadcasting Company*). Abbreviating word formation processes are ways of coining new word types, but the idea that there is a schematic form-meaning pairing which motivates individual word types is harder to demonstrate. How might work on the development of contentful constructions shed light on such questions?

2. EXPANSION AND CONTRACTION IN THE DOMAIN OF CONTENTFUL CONSTRUCTIONS

As Traugott (this volume) has noted, one avenue of work which has explored the relationship between grammaticalization, lexicalization and constructions has been to show that expansion and contraction are phenomena observable in the development of both procedural and contentful constructions (see Traugott and Trousdale forthcoming). In the contentful domain, the clearest examples of contraction are seen in traditional lexicalization processes, whereby an instance of a productive morphological process comes to be reanalyzed as an uninterpretable whole. The following are examples in the history of English (for Brinton and Traugott 2005):

(4) OE gar.leac 'spear leek' > ModE garlic
OE mele.deaw 'honey dew' > ModE mildew
OE bere.ern 'barley place' > ModE barn²

In each case, a compound has been reanalyzed as a monomorpheme. If we consider the first case, in OE a series of compounds are attested where the head noun is *leac*, e.g. *bradleac* 'broadleek', *whitleac* 'whiteleek'. The only such compound attested in the Corpus Of Contemporary American English (Davies 2008-) is *houseleek*; the original compound status of *garlic* has been obscured. It would be difficult, therefore, to propose an [X.leek] \leftrightarrow 'type of leek' construction for contemporary English, but what about for OE? It clearly was possible for speakers to coin new instances of a compounding schema where the head noun was leac 'leek' in OE, but was it productive enough to warrant constructional status? Hilpert (forthcoming) suggests that for a generalization to be a constructional schema "there needs to be evidence that speakers (and not only linguists!) do indeed generalize across the words in question and form a node in the construct-i-con, however weak that node might be", and suggests that corpus data provides quantitative evidence to help us to verify whether a particular pattern is productive enough to merit constructional status. Changes in productivity as witnessed in a diachronic corpus might therefore be suggestive of a generalization becoming a constructional schema (if productivity is increasing), or vice versa (if productivity is decreasing). Such changes tell us what is happening in texts of various kinds, and not necessarily what is happening in terms of changes in individual speakers' mental representations; nevertheless, quantitative data of the kind presented by Hilpert (2013) on the V-ment schema provide evidence for change at a more general population level.

Other data demonstrate short-lived changes in the productivity of a construction. For example, OE had about a dozen of compounds in which *lac* functioned as the head, with a meaning 'actions or proceedings, practice associated with X', where X is the other dependent element of the compound. Examples include *brydlac* 'nuptials', *heaðolac* 'warfare', *wiflac* 'carnal intercourse', *reaflac* 'robbery'. Few compounds survive into ME and one (with slightly altered meaning) survives to ModE (i.e. *wedlock*). The *Oxford English Dictionary* notes that in ME "the suffix was sometimes assimilated in form to the etymologically equivalent but functionally distinct Scandinavian *-laik* suffix" (*OED Online*, s.v. *-lock*, suffix), and no ME innovations survived later than the 14th century. In this case, there appears to be some initial expansion in the ME period, since *lac* begins to collocate with native verbal elements, e.g. *wohlac* (< OE *wogian* 'woo'), *shendlac* 'disgrace' (< OE *scendan* 'shame,

^{2.} The following abbreviations are used for time periods of English: OE for Old English (from the earliest records to the eleventh century; ME for Middle English (the subsequent period to approximately the mid-fifteenth century; ModE for Modern English (from the mid-fifteenth century to the present).

abuse'), and with adjectives, particularly in the case of northern ME, through merger with [A.leik] (a borrowing from Old Norse), e.g. *andrunkenleik* 'intoxication', *gredileik* 'greediness'. This expansion was brief however; speakers had a range of choices to derive nouns from adjectives, and given these choices elsewhere in the construction, especially the highly productive [ADJECTIVE-ness] \leftrightarrow 'entity associated with property denoted by ADJECTIVE' schema, the pattern with *-lac/laik* fell into disuse, with only *wedlock* remaining.

It is difficult, from a theoretical position, to suggest when a particular generalization should be considered a constructional schema, even if we consider the kind of quantitative data provided by Hilpert (2013), for instance. Given the paucity of data for very early varieties of English, one position to take regarding lexical constructionalizations (such as those involving *leac* and *-lac*) in the early periods of English is that if a new construction appears in more than one differently authored text, there has been minimal conventionalization of the innovation. Since both productivity and entrenchment are gradient phenomena, and since corpora can never fully reflect the linguistic knowledge of an individual speaker, perhaps the best we can do is to suggest that changes in productivity as manifest in a corpus show a change in the degree of conventionality associated with particular patterns – an increase in productivity is likely to correlate with a greater degree of conventionality, and potentially a greater entrenchment of the constructional schema in the minds of individual speakers. This is rather different from suggesting that a corpus can tell us when a node in the construction (however weak) has been created or removed (assuming, of course, that in one interpretation at least, a construction is the sum total of an individual speaker's linguistic knowledge, and not a property of a community of speakers).

3. ABBREVIATIONS

While there may be disputes about whether particular instances of affixation or compounding merit constructional status, there is likely to be general agreement that certain patterns such as that represented in (3) above do count as schematic contentful constructions. Furthermore, the discussion in section 2 demonstrates nicely that gradience is pervasive in language. To illustrate this further, and to explore in more detail how construction grammar can illuminate certain issues regarding the development of lexical constructions, I now briefly consider some aspects of gradience in various patterns of abbreviation in the English lexicon. (For a more detailed discussion of such processes, see Mattiello 2013).

Blending (e.g. *smog* < *smoke* and *fog*) is an abbreviation process on both formal and meaningful dimensions. Formally, it involves the incorporation of phonological segments of two independently existing contentful constructions, following patterns that "are sensitive to the syllable structure of the component words" (Hilpert forthcoming; see also Plag 2003). At the meaning pole, the blend involves the merging of concepts associated with both input constructions, without wholly representing either of them: *smog* is neither entirely *smoke* nor entirely *fog*, but rather represents a conceptual overlap of the two. This holds true for other blends such as *motel* and *twirl* (< *twist* and *swirl*). While not entirely predictable, then, there is a structural underpinning to the formation of blends.

Acronyms and initialisms are rather different as processes. On the formal side, the process is much more variable in terms of how much of the original orthographic words are taken; nor is it the case that the phonological correspondence associated with the orthography of the input will be maintained in the abbreviation. For instance, with *NATO* (< *North Atlantic Treaty Organisation*), only the first letters of each word are taken, and the phonological representation of the whole is /neto/, not /nato/,

as it would be if the initial sounds of the original words were carried over. Laser (< light amplification by stimulated emission of radiation) takes only the initial letters of the content words of the input, and ignores the prepositions. FAQ (< frequently asked question) is variable as an acronym and as initialism (where the output is pronounced as a sequence of letters). As an acronym, only the first letters are taken, and the phonological representation is /fak/, where the initial sounds of the original words have been carried over (though presumably there is no other option given the phonological conventions of English). Amphetamine is more complex. The word derives from alphamethylphenethylamine; thus the abbreviation involves the first letter of alpha and methyl, the first three of phene, and the first and last parts of thylamine. In the case of the last input component, while the first segment of the phonological word is a dental fricative (represented orthographically by th), the corresponding part in the abbreviation is an alveolar stop. As for meaning, it is hard to see how the meaning differs between the (composite) input sequence on the one hand, and the acronym or initialism on the other. NATO and North Atlantic Treaty Organisation refer to the same concept; the same is true for e.g. laser and the BBC. (The latter initialism has developed another variant through clipping of the initialism to the Beeb.)

How does this relate to the distinction made by Traugott and Trousdale (forthcoming) on constructionalization and constructional changes? It would seem that some abbreviations involve constructionalization, while others are constructional changes. Constructionalization involves the creation of a new node in the network (in some cases, a word type with contentful semantics); constructional change involves modification of some aspect of an existing construction. Blends appear to be constructionalizations, since both the morphological form and the conventional meaning are new; acronyms and initialisms appear to be constructional changes, since the conventional meaning remains constant (the British Broadcasting Corporation, the BBC and the Beeb all have the same semantics, though they may differ in pragmatics and their use in varying discourse contexts).

Regarding the relationship between schemas and individual word types discussed in section 2, the existence of a range of abbreviation devices in English poses further interesting problems. Blends appear to be more systematic than acronyms and initialism, and also involve constructionalizations; acronyms and initialisms are less systematic and involve constructional change. The systematicity of blends makes them more amenable to an analysis which invokes an abstract constructional schema, but the meaning of such a schema would be highly general, simply specifying that the new word type involves partial integration of concepts associated with the inputs. Blends therefore appear to be intermediate between the conventional constructional schemas associated with derivational morphological schemas, and the rather more ill-defined strategies for assembly associated with acronyms and abbreviations.

4. CONCLUSION

Research on change in word-formation patterns from the perspective of construction grammar (e.g. Hilpert 2013, Traugott and Trousdale forthcoming) has raised a number of interesting questions regarding the emergence, maintenance and loss of both individual word types and constructional schemas. The diverse nature of the word-formation processes – whether involving more systematic patterns associated with affixation and compounding, or less systematic patterns associated with abbreviations – similarly sheds light on how constructions may be ordered and structured. Data from corpora provide evidence for changing patterns of productivity in a community of speakers, but the association between such community-level changes and the nature of changes to constructional representation in an individual mind – particularly in terms of synchronic variation and gradience – remains to be more clearly established.

SOBRE ESQUEMAS E TIPOS DE PALAVRAS NO INGLÊS NA PERSPECTIVA DA CONSTRUCIONALIZAÇÃO E MUDANÇA CONSTRUCIONAL

RESUMO:

Este *squib* discute algumas questões referentes ao crescimento e redução de esquemas de conteúdo na história do inglês, e o surgimento de novos tipos de palavras. A pesquisa recente sobre mudança linguística na perspectiva da gramática de construções tem resultado numa articulação mais clara da relação entre expansão e redução nos domínios «lexical» e «gramatical». A partir do pressuposto de que (i) o conhecimento linguístico é o conhecimento de um sistema de pareamentos simbólicos convencionais e imbricados entre forma e significado (Goldberg 2013), (ii) não há diferença essencial entre construções morfológicas e sintáticas (Croft 2001; Booij 2010), e (iii) assim como as cadeias sintáticas, as expressões morfológicas podem ser dispostas num *continuum*, alinhando-se do mais substantivo ao esquemático, considero a natureza construcional dos esquemas e tipos de palavras na história do inglês.

PALAVRAS-CHAVE: construcionalização, esquemas lexicais, lexicalização

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